

Amendments to the Claims

1. (currently amended): ~~The invention relates to a~~ A method of heating or cooling including freezing ~~of~~ foodstuffs, the method comprising:
~~in a~~ rotating a first closed pipe serpent about an axis of rotation that extends between an
entrance side through which foodstuffs enter the first closed pipe serpent and an opposite
output side through which the foodstuffs exit the first closed pipe serpent and
characterized in that the rotating first closed pipe serpent in a cross section of the axis of rotation has a ~~is shaped~~ non-circular, ~~such as waved or multi angled~~ shape encircling the
axis of rotation including triangle or four-sided shapes; and
supplying foodstuffs to the first closed pipe serpent at an entry point at the entrance side to be
sucked into the first closed pipe serpent and conveyed in a spiral path about the axis of
rotation to the opposite output side by the rotation of the first closed pipe serpent about
the axis of rotation.
2. (currently amended): ~~A~~ The method of claim 1 ~~heating or cooling food items~~ characterized in that the entry point of the rotating first closed pipe serpent, where the foodstuffs are supplied
at the entrance side of the first closed pipe serpent~~conveyed~~, is shaped as an ejector pipe with an increased area of cross section from the entry point ~~of entry towards~~ toward the entrance side of ~~outflow into~~ the first closed pipe serpent.
3. (currently amended): ~~A~~ The method of ~~heating or cooling food items in relation to claim 1 or 2~~ characterized in that ~~two or more rotating closed pipe serpent units are connected with a~~
~~displaced horizontal level of the pipe serpents' axis of rotation~~ , further comprising:
rotating a second closed pipe serpent about a second axis of rotation at a displaced horizontal
level from the axis of rotation of the first closed pipe serpent; and

supplying foodstuffs exiting the output side of the first closed pipe serpent to the entry point of the second closed pipe serpent.

4. (currently amended): A The method of heating or cooling food items in relation to one or more of the claims claim 1-3 characterized in that , further comprising:
synchronizing the quantity and speed by which the food items are conveyed into a the first pipe serpent ~~is synchronized~~ with at least one of the rotational speed of the pipe serpent and/or its absorption capacity.
5. (currently amended): ~~Product~~ Apparatus for heating or cooling including freezing of foodstuffs, the apparatus comprising:
~~in a rotating~~ first closed pipe serpent extending from an entrance side through which foodstuffs enter the first closed pipe serpent to an opposite output side through which the foodstuffs exit the first closed pipe serpent,
wherein characterized in that the rotating first closed pipe serpent rotates about an axis of rotation extending between the entrance side and the output side, and
wherein, in a cross section of the axis of rotation, the first closed pipe serpent has a is shaped non-circular, such as waved or multi angled including triangle or four sided shape encircling the axis of rotation.
6. (new): Apparatus as in claim 5 wherein the non-circular shape of the first closed pipe serpent is selected from the group of shapes including triangular and square shapes.
7. (new): Apparatus as in claim 5 further comprising a similarly shaped second closed pipe serpent rotating about an axis of rotation at a displaced horizontal level from the axis of rotation of the first closed pipe serpent, wherein foodstuffs exiting the output side of the first

closed pipe serpent enter the second closed pipe serpent at the entrance side of the second pipe serpent.

8. (new): Apparatus as in claim 5 further comprising a similarly shaped second closed pipe serpent rotating about an axis of rotation, wherein foodstuffs exiting the output side of the first closed pipe serpent enter the second closed pipe serpent at the entrance side of the second pipe serpent, and wherein a lower part of the first closed pipe serpent is covered in a heated fluid and a lower part of the second closed pipe serpent is covered in a cooled fluid.
9. (new): Apparatus as in claim 5 further comprising an ejector pipe connected to the entrance end of the first closed pipe serpent for introducing foodstuffs into the first closed pipe serpent, wherein the ejector pipe has an inner cross-sectional area that increases toward the entrance side of the first closed pipe serpent.
10. (new): Apparatus as in claim 5 further comprising a control unit receiving a signal representing the temperature of foodstuffs in the first closed pipe serpent and sending a control signal to control the speed of rotation of the first closed pipe serpent.
11. (new): Apparatus as in claim 5 further comprising a loading chute supplying foodstuffs to the closed pipe serpent at the entrance side and a control unit sending a control signal to control the quantity and speed of the foodstuffs supplied by the loading chute.
12. (new): Apparatus as in claim 5 further comprising:
 - a shielding enclosing the first closed pipe serpent and filled to a level with a heated or cooled fluid covering a lower part of the first pipe serpent;
 - a drainage grid at the output side of the first closed pipe serpent through which liquid exiting the closed pipe serpent with the foodstuffs is separated from the foodstuffs; and

a pipe leading from the drainage grid to the shielding to channel the liquid into the fluid in the shielding.

13. (new): The method of claim 1 further comprising:

mixing the foodstuffs in the first closed pipe serpent with supercooled salt water.

14. (new): The method of claim 1 further comprising:

sprinkling the first closed pipe serpent with a heated or cool liquid.

15. (new): The method of claim 1, further comprising:

rotating a second closed pipe serpent about a second axis of rotation;

supplying foodstuffs exiting the output side of the first closed pipe serpent to the entry point of the second closed pipe serpent;

covering the lower part of the first closed pipe serpent with a heated fluid to cook foodstuffs in the first closed pipe segment; and

covering the lower part of the second closed pipe serpent with a cooled fluid to cool foodstuffs in the second closed pipe segment.

16. (new): The method of claim 1 further comprising:

covering a lower part of the first closed pipe serpent in a heating or cooling fluid;

separating liquid from foodstuffs exiting the first closed pipe serpent; and

returning the liquid separated from the foodstuffs to the heating or cooling fluid.